




Encryption

Exercise 5.1 (/ /)

1. Split into working groups of 3 or 4 students
2. Each group is assigned one of the topics (by consensus or randomization) described on the following slides
3. Every group prepares a digital presentation of 15-20min on their topic
4. At least *2 days before* the presentation a PDF export of the slides is uploaded on Moodle (once per group)
5. All groups present their topic to all their classmates who can ask questions afterwards

Presentation Format

- 15-20 minutes presentation
 - *every* group member *has to* present for at least 5min
- ~5 minutes Q&A

 *The presentation can be written and held in  or  based on each group's own preference. Just do not mix English and German slides. English slides but presentation held in German is fine.*

Presentation Topics

1. WEP ⚡ FMS & Chopchop
2. WPA2 ⚡ KRACK
3. PGP ⚡ EFAIL
4. SSL/TLS ⚡ POODLE & DROWN
5. BitLocker ⚡ TCG Opal
6. PDF ⚡ Breaking Encryption & Signatures

💡 *The links provided are some documentation/specification (if publicly available) as well as vulnerability research papers. Each group is supposed to gather additional references as needed.*

Presentation Structure

1. Introduction of the protocol/system
2. Explanation of the attack(s)
3. Mitigation of the attack(s)
4. Recommendations or related information

 *Please provide a list of sources referred to in the presentation as the final slide.*

Timeline

- Tue, 15.11.2021 (*today*)
 - Group building & topic assignment
- Sun, 04.12.2021 (+3 weeks)
 - All PDF-exported presentations uploaded on Moodle
- **Tue, 06.12.2021 (+2 days)**
 - **All groups present their topics** between 15:00 and 17:30